Attorney Docket No. 20002/18496

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:

storing a generational age value in association with an equivalence class in a memory operatively associated with a processor configured to execute instructions associated with the equivalence class;

determining an age of the equivalence class based on the generational age value:

cloning the equivalence class in response to the age of the equivalence class being less than an age threshold; [[and]]

incrementing the generational age value stored in association with the equivalence class in response to the cloning of the equivalence elass, wherein class; and

when the age of the equivalence class is not less than the age threshold: not cloning the equivalence class; merging the equivalence class with a second equivalence class; and referencing the merged equivalence classes using a memory reference.

- 2. (Previously Presented) A method as defined in claim 1, wherein the equivalence class is associated with an escape analysis.
- 3. (Original) A method as defined in claim 1, wherein determining the age of the equivalence class includes an initialization operation.
 - 4 (Cancelled)

- (Previously Presented) A method as defined in claim I, wherein determining
 the age of the equivalence class includes selecting the age of the equivalence class to be a
 greater age of first and second ages associated with respective merged equivalence classes.
- (Previously Presented) A method as defined in claim 1, wherein cloning the
 equivalence class includes associating the equivalence class with one of an old equivalence
 class or a young equivalence class.
- (Previously Presented) A method as defined in claim 6, further comprising
 associating the equivalence class with the old equivalence class in response to the age of the
 equivalence class being greater than or equal to the age threshold.
- (Previously Presented) A method as defined in claim 6, further comprising
 associating the equivalence class with the young equivalence class in response to the age of
 the equivalence class being less than the age threshold.

- 9. (Currently Amended) A system comprising:
 - a memory; and
 - a processor coupled to the memory, the processor to:
 - store a generational age value in association with an equivalence class in the memory:
 - determine an age of the equivalence class based on the generational age value;
 - clone the equivalence class in response to the age of the equivalence class being less than an age threshold; [[and]]
 - increment the generational age value stored in association with the equivalence class in response to the cloning of the equivalence elass, wherein class; and
 - when the age of the equivalence class is not less than the age threshold, the processor is further to:
 - not clone the equivalence class;
 - merge the equivalence class with a second equivalence class;
 - and
 - reference the merged equivalence classes using a memory reference.
- (Original) A system as defined in claim 9, wherein the equivalence class is associated with an escape analysis.
- (Previously Presented) A system as defined in claim 9, wherein the processor is further to determine the age of the equivalence class subsequent to an initialization operation.

12. (Cancelled)

- 13. (Previously Presented) A system as defined in claim 9, wherein the processor is further to determine the age of the equivalence class by selecting the age of the equivalence class to be a greater age of first and second ages associated with respective merged equivalence classes.
- 14. (Previously Presented) A system as defined in claim 9, wherein the processor is further to clone the equivalence class by associating the equivalence class with one of an old equivalence class or a young equivalence class.
- 15. (Previously Presented) A system as defined in claim 14, wherein the processor is further to associate the equivalence class with the old equivalence class in response to the age of the equivalence class being greater than or equal to the age threshold.
- 16. (Previously Presented) A system as defined in claim 14, wherein the processor is further to associate the equivalence class with the young equivalence class in response to the age of the equivalence class being less than the age threshold.

17. (Currently Amended) A machine accessible medium having instructions stored thereon that, when executed, cause a machine to:

store a generational age value in association with an equivalence class; determine an age of the equivalence class based on the generational age value; clone the equivalence class in response to the age of the equivalence class being less than an age threshold, and threshold;

increment the generational age value stored in association with the equivalence class in response to the cloning of the equivalence elass, wherein class: and

> when the age of the equivalence class is not less than the age threshold: not clone the equivalence class; merge the equivalence class with a second equivalence class; and

reference the merged equivalence classes using a memory reference.

- 18 (Original) A machine accessible medium as defined in claim 17, wherein the equivalence class is associated with an escape analysis.
- 19. (Original) A machine accessible medium as defined in claim 17 having instructions stored thereon that when executed cause the machine to determine the age of the equivalence class subsequent to an initialization operation.
 - 20. (Cancelled)
- 21. (Previously Presented) A machine accessible medium as defined in claim 17 having instructions stored thereon that when executed cause the machine to determine the age of the equivalence class by selecting the age of the equivalence class to be a greater age of first and second ages associated with respective merged equivalence classes.

- 22 (Previously Presented) A machine accessible medium as defined in claim 17 having instructions stored thereon that when executed cause the machine to clone the equivalence class by associating the equivalence class with one of an old equivalence class or a young equivalence class.
- 23 (Previously Presented) A machine accessible medium as defined in claim 22 having instructions stored thereon that when executed cause the machine to associate the equivalence class with the old equivalence class in response to the age of the equivalence class being greater than or equal to the age threshold.
- 24. (Previously Presented) A machine accessible medium as defined in claim 22 having instructions stored thereon that when executed cause the machine to associate the equivalence class with the young equivalence class in response to the age of the equivalence class being less than the age threshold.